

IN THE CLAIMS:

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1. (CURRENTLY AMENDED) A thin injection molded article composed of a composite resin material having organic clay dispersed in a polymer, wherein:

said polymer comprises polyphenylene oxide and a butadiene-styrene copolymer,

the relationship between the maximum flow length L of said composite resin material in said thin injection molded article and the average thickness t of the thin injection molded article satisfies the inequality: $L/t \geq 70$;

said thin injection molded article also exhibiting a dielectric breakdown strength of at least 21.1 kV/mm; and

the organic clay is clay which has been rendered organic with an organic agent in which the clay is at least one member selected from the group consisting of montmorillonite, saponite, hectorite, beidellite, stevensite, nontronite, vermiculite, halloysite, mica, fluorinated mica, kaolinite and pyroferite, wherein the majority of the organic clay is dispersed within the polymer as mono-layer particles.

2. (PREVIOUSLY AMENDED) A molded article according to Claim 1, wherein the content of said organic clay is 1-15 parts by weight to 100 parts by weight of the polymer.

3. (PREVIOUSLY AMENDED) A molded article according to Claim 1, wherein said organic clay is clay that has been rendered organic with two or more different organic agents.

4. (PREVIOUSLY AMENDED) A molded article according to Claim 2, wherein said organic clay is clay that has been rendered organic with two or more different organic agents.

5. (CURRENTLY AMENDED) A method for forming a thin injection molded article comprising the steps of:

preparing a liquid composite resin material comprising 100 parts by weight of a polymer and between 1 and 15 parts by weight of an organic clay dispersed in the polymer, wherein

the polymer comprises polyphenylene oxide and a butadiene-styrene copolymer, and

the organic clay comprises at least one member selected from the group of inorganic clays consisting of montmorillonite, saponite, hectorite, beidellite, stevensite, nontronite, vermiculite, halloysite, mica, fluorinated mica, kaolinite and pyroferite, the at least one member having been rendered organic through treatment with at least one organic agent, wherein the treatment also separates layers of the organic clay to form mono-layer particles; and

injecting a flow of the composite resin material into a mold, the composite resin material being injected into the mold through a mold gate and flowing within the mold in a manner characterized by a maximum flow length L to fill the mold substantially completely and form the thin injection molded article having an average

thickness t , the maximum flow length L and the average thickness t of the thin injection molded article satisfying the inequality: $L/t \geq 70$;

treating the thin injected molded article to produce a substantially solid composite resin material within the mold, the solid composite resin material having a tensile modulus of at least 2.59 GPa and a dielectric breakdown strength of at least 21.1 kV/mm; and

removing the thin injected molded article from the mold.

6. (PREVIOUSLY ADDED) A method for forming a thin injection molded article according to Claim 5, wherein the at least one organic agent is selected from a group of organic onium ions consisting of hexylammonium, octylammonium, 2-ethylhexylammonium, decylammonium, dodecylammonium, laurylammonium, hexadecylammonium, octadecylammonium, dioctyl-dimethylammonium, trioctylammonium, dioctadecyldimethylammonium, trioctadecylammonium, tetraethylphosphonium, triethylbenzylphosphonium, tetra-*n*-butylphosphonium, tri-*n*butylhexadecylphosphonium and tri-*n*-butylbenzylphosphonium ions.

7. (PREVIOUSLY AMENDED) A method for forming a thin injection molded article comprising the steps of:

preparing a liquid composite resin material comprising 100 parts by weight of a polymer and between 1 and 15 parts by weight organic clay dispersed in the polymer, wherein

the polymer comprises polyphenylene oxide and a butadiene-styrene copolymer, and

the organic clay comprises at least one member selected from the group of inorganic clays consisting of montmorillonite, saponite, hectorite, beidellite, stevensite, nontronite, vermiculite, halloysite, mica, fluorinated mica, kaolinite and pyroferite, the at least one member having been rendered organic through treatment with at least two organic agents; and

injecting a flow of the composite resin material into a mold, the composite resin material being injected into the mold through a mold gate and flowing within the mold in a manner characterized by a maximum flow length L to fill the mold substantially completely and form the thin injection molded article having an average thickness t , the maximum flow length L and the average thickness t of the thin injection molded article satisfying the inequality: $L/t \geq 70$;

treating the thin injected molded article to produce a substantially solid composite resin material within the mold, the solid composite resin material having a tensile modulus of at least 2.59 GPa and a dielectric breakdown strength of at least 21.1 kV/mm; and

removing the thin injected molded article from the mold.

8. (PREVIOUSLY ADDED) A method for forming a thin injection molded article according to Claim 7, wherein the organic agent is selected from a group of organic onium ions consisting of hexylammonium, octylammonium, 2-ethylhexylammonium, decylammonium, dodecylammonium, laurylammonium,

hexadecylammonium, octadecylammonium, dioctyldimethylammonium, trioctylammonium, dioctadecyldimethylammonium, trioctadecylammonium, tetraethylphosphonium, triethylbenzylphosphonium, tetra-nbutylphosphonium, tri-n-butylhexadecylphosphonium and tri-n-butylbenzylphosphonium ions.

9. (PREVIOUSLY ADDED) A thin injection molded article according to claim 1, wherein the dielectric breakdown strength is not more than about 22.7 kV/mm.

10. (PREVIOUSLY ADDED) A method for forming a thin injection molded article according to claim 5, wherein the dielectric breakdown strength is not more than about 22.7 kV/mm.

11. (PREVIOUSLY ADDED) A method for forming a thin injection molded article according to claim 7, wherein the dielectric breakdown strength is not more than about 22.7 kV/mm.

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